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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/790,330

03/01/2004

Richard Konig

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TECHNOLOGY, PATENTS AND LICENSING, INC.

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SUITE 208

DOYLESTOWN, PA 18901

EXAMINER

MARANDI, JAMES R

ART UNIT

PAPER NUMBER

4157

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DELIVERY MODE

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/790,330

**Applicant(s)**

KONIG ET AL.

**Examiner**

JAMES R. MARANDI

**Art Unit**

4157

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 4/15/04, 10/12/04, 11/1/04, 9/30/05, 3/20/06, 8/1/06, 10/12/07, 1/4/08
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_



## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because of the following minor informalities:  
Element 1600 in Paragraph [0173] is not shown in figure 16. Appropriate correction is required.

### ***Drawings***

2. The drawings are objected to because element 1600, referred to in Figure 16, per Paragraph [0173], is missing. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either

"Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Objections***

3. Claims 23-25 are objected to because of the following informalities: It is not clear if these are method claims, apparatus claims, or a method of operating an apparatus. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 34-38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term "predicting" does not appear to have any one particular methodology associated with it and as such is deemed indefinite.

***Claim Rejections - 35 USC § 101***

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 34-38 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. In the absence of specific disclosures, the term "predicting" refers to an abstract idea at best, or a mathematical algorithm which either way are non-statutory.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent; or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English.

9. Claims 1, 4-11, 13-38, and 41-48 are rejected under 35 U.S.C. 102(b) as being anticipated by D.J. Zigmond et al., International Patent Application Publication Number WO 99/66719 (hereinafter "Zigmond").

Regarding claim 1, Zigmond discloses:

**A method for video segment replacement, the method comprising:**  
**receiving an input video signal** (Figure 5, Programming Delivery); **receiving a trigger signal** (Figure 5, Trigger Delivery) **via a computer communications network identifying a segment in the input video signal** (Page 6, lines 9-11; Page 10, lines 2-4); **and generating an output video signal comprising the input video signal with the segment replaced with a replacement portion** (Figure 5, element 58; Page 8, lines 17-26).

Regarding claim 4, **wherein the segment identified by the trigger signal comprises an advertisement**; rejected as claim 1 (Page 5, lines 16-19).

Regarding claim 5, **wherein the trigger signal comprises a respective trigger signal channel indications**; rejected as claim 1 (Figure 5, element 81, and 83; Page 12, lines 3-5; Page 18, lines 14-31; Page 19, lines 1-30).

Regarding claim 6, **wherein the trigger signal further comprises a time regarding when the advertisement begins or ends on the respective trigger signal channel**; rejected as claim 1; Figure 4, elements 66, 70, and 52; Page 22, lines 16-16.

Regarding claim 7, **wherein the generating further comprises: identifying a current channel of the input video signal; and matching the current channel with the trigger signal channel, before using the trigger signal**; rejected as claim 1; Figure 5, elements 81, 83, 88.

Regarding claim 8, **wherein the identifying is performed using a channel signal from a tuner**; rejected as claims 7 and 1; Figure 5, elements 90, and 58.

Regarding claim 9, **wherein the identifying is performed by analyzing VBI data in the input video signal**; rejected as claim 7 and 1; Page 22, lines 17-19.

Claim 10 is rejected by the same analysis as claims 9 and 1. (Figures 5, 7, and 8)

Regarding claim 11, **wherein the switching signal is generated automatically**; rejected as claim 1, Page 12, lines 3-13.



Regarding claim 13, **wherein the switching signal is generated manually;**  
rejected as claim 1, Page 13, lines 13-14.

10. Claims 14 through 19 are rejected by the same analysis as claim 1 (Figure 5; Page 13, lines 13-14; line 31; Page 14, lines 1-14; Figure 8, elements 56, and 152; Page 9, lines 9-21).

11. Claims 20-22 are rejected by the same analysis as claim 1. (Page 13, lines 13-14; Figure 1)

12. The apparatus of claim 23-25 effectuate a method which is rejected based on the analysis of claim 1. (Figure 5).

13. Claims 26-38 are rejected by the same analysis as claim 1. (Figure 6; Page 5, lines 3-5)

14. Claims 41- 48, and 50-52, apparatus effectuating the method of claim 1, are hereby rejected by the same analysis.

***Claim Rejections - 35 USC § 103***

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in **Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966)**, that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows: (*See MPEP Ch. 2141*)

- a. Determining the scope and contents of the prior art;
- b. Ascertaining the differences between the prior art and the claims in issue;
- c. Resolving the level of ordinary skill in the pertinent art; and
- d. Evaluating evidence of secondary considerations for indicating obviousness or nonobviousness.

16. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zigmond

in view of D.C. Hutchison et al., "Application of Second Generation Advanced Multimedia Display Processor (AMDP2) in a Digital Micro-Mirror Array Based HDTV", IEEE, 2001 (hereinafter "Hutchison").

Zigmond discloses an advertisement insertion method of claim 1. However,

Zigmond is not explicit in disclosing a time delay element as in claim 2, **wherein the output video signal has a time delay from the input video signal.**

Inclusion of delay elements in signal processing is common in the art, as is disclosed substantially by Hutchison (Figure 6). Therefore, it would have been

obvious to a person of ordinary skill in the art, at the time the invention was made, to use Hutchison's teaching in Zigmond's invention as it allows for better synchronization, jitter elimination, etc.

17. Claims 3,39,40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zigmond in view of E. McGrath, Digital Insertion of Advertising into a Digital Stream (DID), International Broadcasting Convention, IEE 1997, (hereinafter "McGrath").

Zigmond discloses an advertisement insertion method of claim 1. However, Zigmond is not explicit in disclosing a failsafe mechanism as in claim 3, **further comprising generating the input video signal intact in case of an operations problem**. However, McGrath substantially discloses a fail safe mechanism (Page 261, Failsafe/ Passive Bypass Splicing). ). Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to use McGrath's teaching in Zigmond's invention as it allows for reliable, uninterrupted output video signal.

18. Claims 39 and 40, effectuating the methods of claims 1 and 3, are hereby rejected by the same analysis.

19. Claims 12, 30, 31, and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zigmond in view of R. Linehart et al., On the Detection and Recognition of Television Commercials, IEEE, 1997, (hereinafter "Linehart").

Zigmond discloses an advertisement insertion method of claim 1, **wherein the switching signal is generated automatically** (Page 12, lines 3-13). However, Zigmond is not explicit in disclosing a **switching signal based on fingerprint data**. However, Linehart substantially discloses how to identify various segments of a video signal (advertisements) based on finger print data (Page 513, section 4.1). Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to use Linehart's teaching in Zigmond's invention as it allows for a wide range of possibilities of identifying video signal categories.

20. Claims 30 and 31 are hereby rejected by the same analysis as claims 1 and 12.

21. Claim 49, apparatus effectuating methods of claim 1 and 12, is hereby rejected by the same analysis.

22. Claims 16 (advertisement for products available for in-person purchase by the group) and 17 (advertisement for services available for in-person purchase by the group) are rejected as being obvious in view of Zigmond's teaching and the common knowledge in the art. Zigmond teaches an advertisement substitution method fully customized to the end user's profile. The end user profile and the feedback mechanism, along with end-user identification disclosed by Zigmond makes it obvious that the advertisements could include services and/or products which may be of interest to the end user. Furthermore, Zigmond defines "household" as "a house or any other site where video programming and advertisements are displayed". This definition fully meets, satisfies, and encompasses the applicant's "Pub" limitation.

### ***Contacts***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES R. MARANDI whose telephone number is (571)270-1843. The examiner can normally be reached on 8:00 AM- 5:00 PM M-F, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vu Le can be reached on (571) 272-7332. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 4157

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James R. Marandi/  
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